

ATTACHMENT

Attach-1: GIS Maps for each Province.....	A - 1
Figure 1 GIS Map of Phongsaly Province .....	A - 1
Figure 2 GIS Map of Luangnamtha Province.....	A - 2
Figure 3 GIS Map of Oudomxay Province.....	A - 3
Figure 4 GIS Map of Bokeo Province.....	A - 4
Figure 5 GIS Map of Luangphrabang Province.....	A - 5
Figure 6 GIS Map of Huaphanh Province.....	A - 6
Figure 7 GIS Map of Xayabury Province.....	A - 7
Figure 8 GIS Map of Xiengkhuang Province.....	A - 8
Attach-2: Brief Project Features & Drawings for Priority Project Sites.....	A - 9
1. Nam Likna (Sequence No.4).....	A - 9
2. Nam Ou Neua (Sequence No.5).....	A - 13
3. Nam Long (Sequence No.7).....	A - 17
4. Nam Ham 2 (Sequence No.31).....	A - 21

**200 Phongsaly**  
HH Electrification Ratio  
14% (2005) – 67% (2020)

**206 Gnot Ou**  
HH Electrification Ratio  
5% (2005) – 50% (2020)

**201 Phongsaly**  
HH Electrification Ratio  
33% (2005) – 80% (2020)

**204 Samphan**  
HH Electrification Ratio  
6% (2005) – 60% (2020)

**205 Bouneua**  
HH Electrification Ratio  
28% (2005) – 80% (2020)

EDL 115kV Extention  
to Bouneua  
after 2010 (Not PTD 2)

**207 Bountai**  
HH Electrification Ratio  
12% (2005) – 100% (2020)

**202 May**  
HH Electrification Ratio  
6% (2005) – 40% (2020)

**203 Khua**  
HH Electrification Ratio  
12% (2005) – 70% (2020)

Figure 1 Electrification Plan in Phongsaly



**Legend**

**Classified Village**

- ▲ Electrified by EDL Grid
- ▲ Electrified by Import Electricity
- ▲ Electrified by Off-grid (Hydro power)
- Electrified by Off-grid (Pico)
- ▲ Electrified by Off-grid (Diesel)
- ★ Electrified by Off-grid (Solar)
- None
- EDL Short Term
- EDL Long Term
- JICA Off-grid Pre-F/S
- Potential site (Village Hydro Class)
- Existing Plan of Pico-hydro and Diesel
- Existing Plan of Solar Power
- Others

**Road**

- Paved Road
- Street Road
- Improved Unpaved Road
- Unpaved Road
- Temporary Road
- Footpath

**115kv Transmission line**

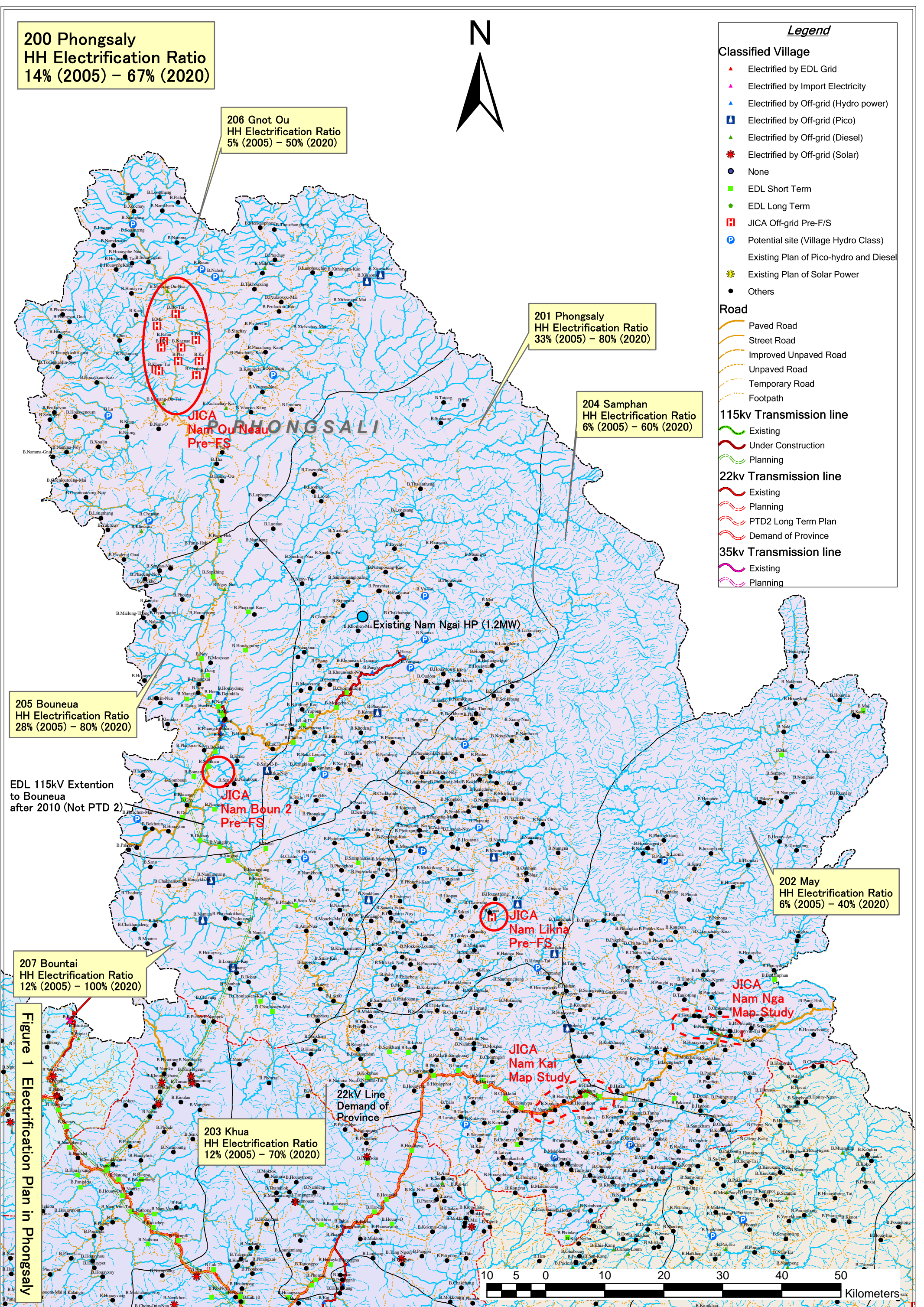
- Existing
- Under Construction
- Planning

**22kv Transmission line**

- Existing
- Planning
- PTD2 Long Term Plan
- Demand of Province

**35kv Transmission line**

- Existing
- Planning



- Legend**
- Classified Village**
- ▲ Electrified by EDL Grid
  - ▲ Electrified by Import Electricity
  - ▲ Electrified by Off-grid (Hydro power)
  - ▲ Electrified by Off-grid (Pico)
  - ▲ Electrified by Off-grid (Diesel)
  - ▲ Electrified by Off-grid (Solar)
  - None
  - EDL Short Term
  - EDL Long Term
  - JICA Off-grid Pre-F/S
  - Potential site (Village Hydro Class)
  - Existing Plan of Pico-hydro and Diesel
  - Existing Plan of Solar Power
  - Others
- Road**
- Paved Road
  - Street Road
  - Improved Unpaved Road
  - Unpaved Road
  - Temporary Road
  - Footpath
- 115kv Transmission line**
- Existing
  - Under Construction
  - Planning
- 22kv Transmission line**
- Existing
  - Planning
  - PTD2 Long Term Plan
  - Demand of Province
- 35kv Transmission line**
- Existing
  - Planning

**300 Luangnamtha**  
**HH Electrification Ratio**  
**35% (2005) – 80% (2020)**

**303 Long**  
**HH Electrification Ratio**  
**10% (2005) – 60% (2020)**

**304 Viengkhoukha**  
**HH Electrification Ratio**  
**23% (2005) – 80% (2020)**

**302 Sing**  
**HH Electrification Ratio**  
**42% (2005) – 80% (2020)**

**301 Namtha**  
**HH Electrification Ratio**  
**65% (2005) – 100% (2020)**

**305 Nalae**  
**HH Electrification Ratio**  
**15% (2005) – 70% (2020)**

Import Electricity 2003–2007  
 Import: 585 kip/kWh  
 Sell: 1,000 kip/kWh  
 Peak Demand: 1MW  
 Capacity: 6MW

**Nam Tha 3**  
**1.2 MW**  
**Under construction**

**EDL 22kv**  
**from Sing to Xiengkok**  
**up to 2008 (PTD 2)**

**JICA**  
**Nam Long**  
**Pre-F/S**

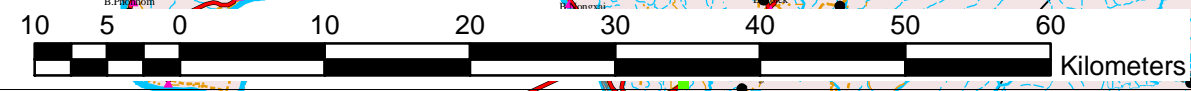
**JICA**  
**Nam Pha**  
**Site Recon.**

**JICA**  
**Nam Heng**  
**Site Recon.**

**22kv Line**  
**Demand of Province**

**35kv from China**

**10kv from China**



**Figure 2 Electrification Plan in Luangnamtha**